DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge Program 333 Burma Rd.
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December 10, 2007

Contract No. 04-0120F4 04-SF-80-13.2 / 13.9 Self-Anchored Suspension Bridge Letter No. 05.03.01-000938

Michael Flowers Project Executive American Bridge/Fluor Enterprises, a JV 375 Burma Road Oakland, CA 94607

Dear Michael Flowers,

Project Schedule Submission for November 2007

The Department has completed review of Submittals ABF-SUB-000450R00, Project Schedule Revision No. 14, (Primavera file "ABF.U13.R0.112007.xer") and ABF-SUB-000451R00, Project Schedule Status No. 14 (Primavera file "ABF.U14.S0.112007.xer"), both submitted on November 29, 2007.

The status file "S0" is an update of the October 2007 schedule which contains actual start dates, actual finish dates, estimated remaining durations and expected finish dates. The revision file "R0" is ABF's revised work plan for completing the project. Both files have a data date of November 20, 2007

These schedule submissions which provide ABF's current plan to complete the work are "Accepted as Noted." Comments concerning the November 2007 schedule revision, "R0," are listed below. It is important to note that this schedule review is not all-inclusive due to the significant changes that have occurred since the October 2007 schedule submission.

- 135 new activities added
- 232 actual starts without progress this period
- 71 active activities with no progress
- 51 as-built activities added
- 42 in-progress activities added
- 197 activities performed out of sequence
- 14 activities with modified original durations
- 30 activities with diminishing progress
- 306 new activity codes added
- 158 modified activity codes
- 31 existing activity relationships deleted
- 228 relationships added when activity added
- 80 added expected finish dates

A) Project and Schedule Status

- A1. Number 1.4.5.1: It is noted that 23 CCOs have been formally issued with Authorization to Proceed. Four (4) of the 23 CCOs have agreed upon pricing and are ready for CCO sign-off and implementation into the project schedule. Incorporate all required scheduling codes and attributes for the following CCOs:
 - CCO 15 (W2-Hinge K and Saddle Modification)
 - CCO 36 (Tower Anchorage Base Plate and RFI Cleanup)
 - CCO 40 (Cable Tie-Down Alternative)
 - CCO 46 (Additional Maccalloy High Strength Prestressing Rods).
- A2. Number 1.7.2.1: The Department continues to analyze the effects of CCO 19. A response will be forthcoming.
- A3. Number 1.9.1: The Department's response to ABF-CAL-LTR-000360 was discussed during the November 21, 2007 Weekly Schedule Meeting.
- A4. There are numerous activities that contain lag relationships. The use of these relationships creates difficulties in monitoring and tracking progress. Many Finish to Start lag relationships should represent activities. It is preferred that the lags are replaced with task activities and the use of lags minimized. Refer to attached lag report on the main schedule (ABF.U14.R0.071020 SAS Project Update 14 dd 11/20/07 rev 0) for a list of activities with lag greater than 5 days. We would like to continue to discuss the use of lags during our weekly meetings. (LagReport_MainSchedule_greaterthan5d.pdf).
- A5. Numerous activities have started but have not been statused. Update progress on all on-going activities.
- A6. There are numerous activities in the schedule with durations greater than 20 days. As agreed during our weekly schedule meetings, activities with durations greater than 20 days starting within six months of the data date, should be broken down into more detailed activities with appropriate durations. The activities of particular concern are attached. Modify the activity type to a level of effort and provide additional details of the summary activities as agreed. We would like to review the proposed changes during our weekly meetings. (Durations_Greater_20days.pdf)

B) Area Specific Detail - W2 Cap Beam

B1. No Comments

C) Area Specific Detail - Temp Towers

C1. Number 3.1.3.1: The schedule shows that fabrication is completed on the D and F piles (Activities TTFABBH0220 and TTFABBH0300, respectively) and that they were transported on November

- 20, 2007 with a projected delivery date of January 4, 2008. However, the narrative and 4-week rolling schedule shows that D and F piles are not yet complete and are not expected to be in transport until early 2008. Verify or revise accordingly.
- C2. **Number 3.1.3.2:** The schedule shows that fabrication of the D-driving frame (Activity TTFAB000230) will start on January 25, 2008, while the narrative indicates that fabrication has already started. Verify or revise accordingly.
- C3. **Number 3.1.3.3:** The narrative indicates that fabrication of the F-driving frame has commenced with the fabrication of the built-up box sections being completed and ready for shipment, while the schedule shows that the fabrication of the F-driving frame (Activity TTFAB000310) will not begin until February 15, 2008. Verify or revise accordingly.
- C4. **Number 3.1.3.4:** The narrative shows that fabrication of the Towers and Trusses A-C have commenced with the fabrication of the built-up box sections being complete and in transport. There are no actual starts on any of the Tower or A-C Truss fabrication activities in the schedule. Verify or revise accordingly.
- C5. Number 3.2.1.2: A hearing is scheduled on December 11, 2007, where ABF's issues with the current land temporary tower foundation's subcontractor will be addressed.
- C6. Numbers 3.2.2.1 and 3.2.2.2: The impacts of the temporary tower contracting issues are difficult to evaluate since many of the temporary tower activities have not been accurately statused. The Department understands that these deficiencies noted above will be corrected once ABF resolves the temporary tower foundations and detailer subcontracting issues.

D) Area Specific Detail - OBG / Bridge Deck

- D1. **Number 4.2.1.1:** Identify specific MEP issues that could potentially impact OBG fabrication so that appropriate mitigation measures can be implemented.
- D2. **Number 4.2.1.5:** The sooner ZPMC's concerns can be identified, the sooner appropriate mitigation measures can be implemented.
- D3. The schedule shows a finish date of November 20, 2007 for the deck plate mock-up section. As ABF is aware, there have been issues concerning the acceptance of Weld Trial No. 2 and the UT Procedure for the past month. Weld trials cannot be completed until the UT Procedure has been accepted. The Contractor received the calibration blocks to be used in the development of the UT Procedure on November 14, 2007. An expected finish of November 20, 2007 does not seem realistic considering these facts. Include all issues affecting the expected finish dates in future narratives and revise the schedule accordingly.

E) Area Specific Detail - T1 Tower

E1. Number 5.4.1: There are eight (8) unresolved Non-Conformance reports related to the T1 Tower. Provide a description and status of the outstanding Non-Conformance reports in future narratives.

NCR #	Description	State Letter Issued to ABF
NCR 5 – 77m Mock-up Longitudinal Stiffener to Skin Plate Weld	The Contractor allowed the Fabricator to make repairs to rejectable indications found in the complete joint penetration welds between the longitudinal stiffener and Skin Plates A and E of the 77m mock-up at lengths greater than 10% of the cumulative length of the welds.	05.03.01- 000757
NCR 7 – 114m Mock-up UT Angle Determination and Db Scanning Levels	The Contractor's Quality Control Inspectors were not following the approved UT procedure.	05.03.01- 000757
NCR 8 - 114m Mock-up Skin Plate Welds	The Contractor allowed the Fabricator to make repairs to a number of welds for Skin Plates A MA-106 and B MA-101 that had defects with cumulative lengths in excess of 10% of the weld lengths without notifying the Department.	05.03.01- 000757
NCR 9 - 114m Mock-up Skin B Upper Panel	The Contractor allowed the Fabricator to proceed with third time repairs to Skin B sub-assemblies without the approval of the Engineer.	05.03.01- 000795
NCR 10 – 114m Mock-up Skin B Upper Panel	The Contractor allowed the Fabricator to make repairs to rejectable indications found in the complete joint penetration welds between the longitudinal stiffener and Skin Plate B at lengths greater than 10% of the cumulative length of the welds.	05.03.01- 000795
NCR 11 – Mock- up	Quality Control failed to document the required fit-up inspection of Longitudinal Stiffener Piece Mark p920-3 to Interior Splice Assembly MUC –A75, Weld Joint No. 3A.	05.03.01- 000795
NCR 12 - 114m Mock-up Skin Plate E	The Contractor allowed the Fabricator to make repairs to rejectable indications found in the complete joint penetration weld joint #3 on Skin Plate E at lengths greater than 10% of the cumulative length of the welds.	05.03.01- 000795
NCR 13 – 89m Mock-up	The Contractor allowed the Fabricator to weld parts of the 89m strut sub- assemblies with an electrode not in compliance with the Contract Specifications.	05.03.01- 000795

F) Area Specific Detail - Cable System

F1. **Number 6.2.1.1:** The Department is working diligently to resolve all issues in reference to RFI 270 (Main Cable Lighting).

G) Area Specific Detail - E2 Cross Beam

G1. Number 7.2.1.1: Access issues to complete the survey of the existing column cages at E2 are currently being worked out with ABF.

H) Area Specific Detail - MEP Services

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H1. Numbers 8.2.1.1 to 8.2.3.1: See previous comments in State letter 05.03.01-000551. Changes in the layout and details of cable tray supports attached to the OBG will be captured under CCO42S1.

Sincerely,

GARY PURSELL Resident Engineer

cc: Don Ross

file: 05.03.01, 55.0450, 55.0451